

Claims:

1. A sprayer apparatus, comprising:
 - a pressure chamber having an inlet and an outlet;
 - a backflow valve having two one-way valves separated by a weep chamber, said backflow valve being positioned in fluid communication with the inlet of said pressure chamber such that the two one-way valves prevent fluid flow from said pressure chamber through the outlet; and
 - a sealed vessel in fluid communication with said pressure chamber.
2. The sprayer apparatus of Claim 1, further comprising a pressurized fluid source in fluid communication with the inlet of said pressure chamber.
3. The sprayer apparatus of Claim 2, wherein said pressurized fluid source is connected to the inlet of said pressure chamber by a quick-disconnect coupling.
4. The sprayer apparatus of Claim 1, further comprising a shutoff valve in fluid communication with the outlet of said pressure chamber, the shutoff valve normally preventing fluid flow from said pressure chamber through the outlet and being operable to allow fluid flow from said pressure chamber through the outlet.
5. The sprayer apparatus of Claim 1, wherein the weep chamber of said backflow valve includes a weep plunger that reduces backflow pressure within the weep chamber.
6. The sprayer apparatus of Claim 5, wherein said weep plunger defines a plurality of apertures and said weep chamber further comprises a biasing spring and a plunger guide having a head, wherein said spring biases said weep plunger against the head of said plunger guide and the head of said plunger guide partially covers the apertures defined by the weep plunger.

7. The sprayer apparatus of Claim 5, wherein the weep chamber of said backflow valve further includes a weep outlet having a seal tube configured to be ejected from the weep outlet when under a pre-determined backflow pressure in the weep chamber.

8. The sprayer apparatus of Claim 1, wherein the weep chamber of said backflow valve includes a weep diaphragm that reduces backflow pressure within the weep chamber.

9. The sprayer apparatus of Claim 8, wherein the weep chamber of said backflow valve further includes a weep outlet having a seal tube configured to be ejected from the weep outlet when under a pre-determined backflow pressure in the weep chamber.

10. The sprayer apparatus of Claim 9, wherein the weep diaphragm defines an aperture and said weep chamber further comprises a shoulder such that the shoulder restricts the amount that the weep diaphragm may flex when under backflow pressure.

11. The sprayer apparatus of Claim 1, wherein said pressure chamber is configured as a sprayer wand.

12. A sprayer system comprising:
a sprayer wand having an outlet;
a water tank in fluid communication with said sprayer handle;
a liquid additive tank in fluid communication with said sprayer handle; and
a backflow valve positioned between said water tank and said sprayer handle such that said backflow valve prevents fluid flow from said sprayer handle to said water tank.

13. The sprayer system of Claim 12, wherein said backflow valve comprises two one-way valves separated by a weep chamber.

14. The sprayer system of Claim 13, wherein the weep chamber includes a weep plunger that reduces backflow pressure within the weep chamber.

15. The sprayer system of Claim 14, wherein said weep plunger defines a plurality of apertures and said weep chamber further comprises a biasing spring and a plunger guide having a head, wherein said spring biases said weep plunger against the head of said plunger guide and the head of said plunger guide partially covers the apertures defined by the weep plunger.

16. The sprayer system of Claim 13, wherein the weep chamber includes a weep diaphragm that reduces backflow pressure within the weep chamber.

17. The sprayer system of Claim 16, wherein the weep chamber further includes a weep outlet having a seal tube configured to be ejected from the weep outlet when under a pre-determined backflow pressure in the weep chamber.

18. The sprayer system of Claim 17, wherein the weep diaphragm defines an aperture and said weep chamber further comprises a shoulder such that the shoulder restricts the amount that the weep diaphragm may flex when under backflow pressure.

19. The sprayer system of Claim 12, wherein said water tank is pressurized and is connected to said sprayer handle by a quick-disconnect coupling.

20. A sprayer system to be connected to an externally pressurized water source, comprising:

- a mixing chamber;

- a tank in fluid communication with said mixing chamber, said tank containing a liquid additive;

- means for supplying a pressurized water stream; and

- a backflow valve configured to prevent the liquid additive from flowing into said means for supplying a pressurized water source.

21. The sprayer system of Claim 20, wherein said backflow valve comprises two one-way valves separated by a weep chamber.

22. The sprayer system of Claim 21, wherein the weep chamber includes a weep plunger that reduces backflow pressure within the weep chamber.

23. The sprayer system of Claim 21, wherein the weep chamber includes a weep diaphragm that reduces backflow pressure within the weep chamber.

24. The sprayer system of Claim 23, wherein the weep chamber further includes a weep outlet having a plastic seal tube configured to be ejected from the weep outlet when under a pre-determined backflow pressure in the weep chamber.